AMENDMENTS TO THE CLAIMS

Please amend the claims as follows: Claims 1-13 (Cancelled)

14. (Currently Amended) A process for the cryo-preservation of a primary <u>regeneration</u> <u>tissue explant</u> comprising the <u>step of following steps:</u>

cultivating a plant tissue on an induction medium for a time sufficient to induce a primary regeneration tissue comprising embryogenic cells;

culturing the primary regenerating tissue on a multiplication medium for a time sufficient to maintain a stable proliferation of the primary regeneration tissue; and

cryofreezing the primary <u>regeneration tissue</u> explant, wherein the primary explant comprises a plant tissue that has been subjected to an induction medium for a time sufficient to induce a primary regenerating tissue.

- 15. (Currently Amended) The process of claim 14, further comprising a two step incubation of the primary <u>regeneration tissue explant</u>, wherein the primary <u>regeneration tissue explant</u> is first incubated in a medium containing 0.4 M sucrose followed by incubating the primary <u>regeneration tissue explant</u> in a medium containing 1 M sucrose.
- 16. (Currently Amended) The process of claim 14, further comprising the step of dehydrating the primary <u>regeneration tissue explant</u> prior to cryofreezing.
- 17. (Currently Amended) The process of claim 16, wherein the dehydration step involves placing the primary regeneration tissue explant in an air current of a laminar flow cabinet, in a stream of compressed air, or in an airtight container together with silica gel or various oversaturated salt solutions to control the relative humidity.
- 18. (Currently Amended) The process of claim 14, further comprising the step of prefreezing the primary regeneration tissue explant prior to cryofreezing.
- 19. (Previously Presented) The process of claim 18, wherein the pre-freezing temperature is between -20°C and -40°C.

2

321048.1

- 20. (Previously Presented) The process of claim 14, wherein the plant tissue utilized is derived from a cocoa, coffee, or carrot plant.
- 21. (Previously Presented) The process of claim 20, wherein the plant tissue utilized is derived from *Coffea canephora or Coffea arabica*.
- 22. (Previously Presented) The process of claim 20, wherein the plant tissue utilized is derived from *Theobroma cacao*.
- 23. (Previously Presented) The process of claim 20, wherein the plant tissue utilized is derived from *Daucus carota*.
- 24. (Currently Amended) A process for the cryo-preservation of a primary <u>regeneration</u> <u>tissue explant</u> comprising the steps of:

incubating a plant tissue in an induction medium for a time sufficient to induce a primary regeneration tissue comprising embryogenic cells explant;

dehydrating the primary <u>regeneration tissue explant to a water content of at least 28</u> g/100g dry weight;

prefreezing the primary <u>regeneration tissue explant</u> to a temperature between -20°C and -40°C; and

cryofreezing the primary regeneration tissue explant.

- 25. (Currently Amended) The process of claim 24, wherein the prefreezing step comprises further comprising a two step incubation of the primary regeneration tissue explant, wherein the primary regeneration tissue explant is first incubated in a medium containing 0.4 M sucrose followed by incubating the primary regeneration tissue explant in a medium containing 1 M sucrose.
- 26. (Currently Amended) The process of claim 24, wherein the dehydration step involves placing the <u>regeneration tissue primary explant</u> in an air current of a laminar flow cabinet, in a stream of compressed air, or in an airtight container together with silica gel or various oversaturated salt solutions to control the relative humidity.

3

321048.1

- 27. (Previously Presented) The process of claim 24, wherein the plant tissue utilized is derived from a cocoa, coffee, or carrot plant.
- 28. (Currently Amended) The process of claim 24, wherein the plant tissue utilized is derived from *Theobroma cacao*, *Coffea canephora* or *Coffea arabica*.
- 29. (Currently Amended) The process of claim 24, wherein the plant tissue utilized is derived from *Theobroma caeao* further comprising the step of culturing the primary regeneration tissue on a multiplication medium for a time sufficient to maintain a stable proliferation of primary regeneration tissue.
- 30. (Previously Presented) The process of claim 24, wherein the plant tissue utilized is derived from *Daucus carota*.
- 31. (Currently Amended) A process for the cryo-preservation of a primary <u>regeneration</u> <u>tissue explant</u> comprising the steps of:

incubating a plant tissue in an induction medium for a time sufficient to induce a primary explant regeneration tissue comprising embryogenic cells; and cryofreezing the primary explant regeneration tissue.

- 32. (Currently Amended) The process of claim 31, further comprising the step of dehydrating the primary explant to a water content of at least 28 g/100g dry weight culturing the primary regeneration tissue on a multiplication medium for a time sufficient to maintain a stable proliferation of primary regeneration tissue.
- 33. (Currently Amended) The process of claim 31, further comprising the step of prefreezing the primary regeneration tissue explant to a temperature between -20°C and -40°C.